

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,150	02/14/2002	Harri Pekonen	04770.00040	6898
22907 7	590 02/16/2005		EXAM	INER
BANNER & 1001 G STREE			PHILPOTT, JUSTIN M	
SUITE 1100			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20001			2665	

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/075,150	PEKONEN, HARRI
Office Action Summary	Examiner	Art Unit
	Justin M Philpott	2665
The MAILING DATE of this communicatio Period for Reply	n appears on the cover sheet with	h the correspondence address
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI  - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicatio  - If the period for reply specified above is less than thirty (30) days, If NO period for reply is specified above, the maximum statutory p  - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a relon. , a reply within the statutory minimum of thirty period will apply and will expire SIX (6) MONT statute, cause the application to become ABA	ply be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on	15 December 2004.	
	This action is non-final.	;
3) Since this application is in condition for al closed in accordance with the practice un	llowance except for formal matte	
Disposition of Claims		
4) ⊠ Claim(s) 1-51 is/are pending in the applic 4a) Of the above claim(s) is/are wit 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-51 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction as	thdrawn from consideration.	
Application Papers		
9) The specification is objected to by the Exa  10) The drawing(s) filed on is/are: a)  Applicant may not request that any objection to Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the	accepted or b) objected to be to the drawing(s) be held in abeyand correction is required if the drawing(s	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		•
12) Acknowledgment is made of a claim for fo a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. ments have been received in Ap e priority documents have been r sureau (PCT Rule 17.2(a)).	oplication No received in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)	4) T 1-1-miss 0	Immory (PTO 413)
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-94</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date</li> </ul>	8) Paper No(s)	ummary (PTO-413) l/Mail Date formal Patent Application (PTO-152) 

Art Unit: 2665

## **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 15, 2004 has been entered.

#### Response to Arguments

2. Applicant's arguments with respect to newly amended claims 1-51 have been considered but are most in view of the new ground(s) of rejection.

Specifically, new limitations recited in the independent claims are taught by the newly cited art of Yano et al. as discussed in the following action.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,923,655 to Veschi et al. in view of U.S. Patent No. 6,807,235 to Yano et al.

Art Unit: 2665

Regarding claims 1, 14, 24, 30, 38 and 43, Veschi teaches a time-slicing digital video broadcasting transmitter system and method comprising: a buffer (e.g., queue of packets in Ethernet controller, see col. 10, lines 31-36) that receives at least one of digital video content and digital audio content from an information service provider (e.g., server 160, see col. 9, lines 35-39); and encapsulator (e.g., packet assembly circuit within processor 210) that receives the buffered content from the buffer and that forms at least one packet header (e.g., header 310) for a current packet of a current burst of packets (e.g., see col. 10, lines 27-36 regarding packet assembly circuit), wherein the current packet contains a first portion of the buffered content (e.g., see col. 13, lines 34-42 regarding sample 380), wherein the at least one packet header contains time-slice information (e.g., position identifier 370) that includes a time-slice parameter specifying a relationship between the current packet of the current burst of packets (e.g., audio video sample 380, one of samples 1-5 in FIG. 5) and a subsequent burst of packets that contains a second portion of the buffered content (e.g., one of other samples, see col. 13, lines 42-44 and col. 14, lines 9-19); and a digital video broadcast transmitter (e.g., Ethernet controller 206) that transmits the current burst of packets and the subsequent burst of packets (e.g., see col. 9, lines 56-63). Further, regarding claims 14, 24 and 38, Veschi teaches a corresponding receiver to the above-mentioned digital video broadcasting transmitter system, comprising a buffer (e.g., receiving buffer 510) and an application processor (e.g., packet disassembly circuit) for extracting information specifying a relationship between the current packet of the current burst of packets and the subsequent burst of packets (e.g., see col. 16, lines 12-30).

Art Unit: 2665

However, Veschi may not specifically disclose a parameter received between a current burst of packets and a subsequent burst of packets allows the receiver to enter a reduced power-consumption state for a duration.

Yano also teaches a communications system and, specifically, teaches a parameter (e.g., within DPCCH, see FIG. 5) received between a current burst of packets (e.g., DPDCH data in a first slot of a frame) and a subsequent burst of packets (e.g., DPDCH data in a subsequent slot) allows the receiver to enter a reduced power-consumption state for a duration (e.g., see col. 5, line 57 – col. 6, line 14; and col. 6, lines 38-59). The teachings of Yano provides transmission operation with the improvement of reduced power consumption (e.g., see col. 2, lines 60-67). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to implement the teachings of Yano within the system of Veschi in order to provide operation with the improvement of reduced power consumption (e.g., see col. 2, lines 60-67).

Regarding claims 2, 20, 25, 31, 39, 44 and 48, Veschi teaches the time-slice information specifies, in a way that is independent of a number of data packet-transmission intervals, an amount of time that elapses between transmission of the current packet and transmission of a first-transmitted packet of the subsequent burst of packets (e.g., see FIG. 5 regarding particular time intervals and see Table 1 in col. 14 regarding length of time in ms corresponding to position identifiers; see also col. 13, line 33 – col. 16, line 55).

Regarding claims 3 and 34, Veschi teaches the time-slice information (e.g., position identifier 370) specifies a time-slice duration for transmitting the current burst of packets (e.g., see Table 1 in col. 14 regarding duration/length of time in ms in combination with packet delay in ms).

Art Unit: 2665

Regarding claims 4 and 32, Veschi teaches the time-slice information includes a time-slice index for numbering originally transmitted bursts of packets (e.g., see Table 1 in col. 14 regarding position identifier).

Regarding claim 5, the buffer of Veschi is inherently large enough to store at least two full bursts of data from the information service provider and any data to be transmitted between transmission of the two full bursts of data (e.g., see col. 10, lines 32-36 regarding queuing data packets having position identifiers).

Regarding claim 6, Veschi teaches the amount of time that elapses between transmitting the current packet and transmitting the first-transmitted packet of the subsequent burst is determined based at least in part upon how many packets will be transmitted between transmitting the current packet and transmitting the subsequent packet (e.g., see Table 1 in col. 14 regarding times in ms, sample number, and position identifier).

Regarding claim 7, Veschi teaches the amount of time that elapses between transmitting the current packet and transmitting the first-transmitted packet of the subsequent burst is determined based at least in part upon an amount of transmitter-idle time between transmission bursts (e.g., see Table 1 in col. 14 regarding delay of each packet in ms).

Regarding claim 8, this claim was rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, elastic, FIFO, ring and dual buffers are all well known in the art as available buffer types. In Applicant's response to the previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are

Art Unit: 2665

hereafter taken to be admitted prior art. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to utilize elastic, FIFO, ring and/or dual buffers since such buffers are all well known in the art as available buffer types.

Regarding claims 9, 19, 21, 26, 27, 33, 35, 40, 45 and 49, while Veschi may not specifically disclose the encapsulator places the time-slice information (e.g., position identifier 370) into lower layer protocol packet header bits, Veschi rather discloses the time-slice information is provided within message 330 (e.g., see FIG. 3). However, it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to shift the location of the position identifier 370 from message portion 330 to header portion 310 (see FIG. 3) since it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. The contention of obvious choice in design can be overcome if Applicant establishes unexpected results. In re Japikse, 86 USPQ 70 (CCPA 1950).

Regarding claims 10, 22, 28, 36, 41, 46 and 50, these claims were rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, DVB DSM-CC protocol is well known in the art to provide digital video broadcast. In Applicant's response to the previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to utilize the DVB DSM-

Art Unit: 2665

CC section protocol since such a protocol is well known in the art to provide digital video broadcast.

Regarding claims 11, 23, 29, 37, 42, 47 and 51, while Veschi in view of Yano may not specifically disclose time-slice information (e.g., position identifier 370) is placed into at least one byte reserved but not used for media access control addressing, Veschi suggests such a feature by providing reserved/length field 340 comprising at least one reserved byte for media access control addressing (e.g., see col. 11, line 1 – col. 12, line 30). Furthermore, while Veschi may not specifically disclose the position identifier is placed in the reserved field 340, it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to shift the location of the position identifier from field 370 to field 340 since it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. The contention of obvious choice in design can be overcome if Applicant establishes unexpected results. In re Japikse, 86 USPQ 70 (CCPA 1950).

Regarding claims 12, 13 and 15-18, these claims were rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, indexes of decreasing or increasing order or first/last packet indications are well known in the art of transmitting packet bursts. In Applicant's response to the previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be

admitted prior art. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to implement indexes of decreasing or increasing order or first/last packet indications, since such indexes and first/last packet indications are well known in the art of transmitting packet bursts.

Regarding claims 19, 26 and 33, while Veschi in view of Yano may not specifically disclose including an indication of whether the burst of packets is an original burst or a copy burst, these claims were rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, including an indication of whether the burst of packets is an original burst or a copy burst is well known in the art. In Applicant's response to the previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art. Accordingly, at the time of the invention it would have been obvious to one of ordinary skill in the art to transmit copy bursts and include indications of whether a burst is an original or a copy since such an implementation is well known in the art.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

Art Unit: 2665

Page 9

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin M Philpott

ALPUS H. HSU PRIMARY EXAMINER

Man v. von